

TREATMENT OF MOISTURE RELATED LESIONS IN CHILDREN

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Introduction

No-one likes to see children in pain. Caring for babies and children with painful nappy rash is a common complaint but one that we struggle to treat. This is evident by the vast array of products available, over the counter or by prescription, to manage it.

Babies or children can have delicate or fragile skin which is particularly vulnerable when they are ill or undergoing medical treatments.

As Paediatric Tissue Viability Nurses we aim to be proactive by evaluating new products that could improve care and general well-being in this patient group. This poster reflects our experience in using Proshield Plus skin protectant on a variety of common and troublesome moisture and other skin lesions in a children's hospital.

Methods

Between September 2011 and end January 2012, neonates, babies and children aged between 1 week and 16 years of age, with perianal dermatitis/excoriation (associated with incontinence), clinically dry/cracked skin, perianal thrush, pressure injuries (grades 1 and 2), and other moisture lesions had the damaged skin treated with Proshield Plus.

Results

Proshield Plus was used on more than 40 patients but due to rapid turnover some could not be followed up.

- 38 cases were followed from referral to recovery/resolution
- 30 (79%) showed good improvement or healed
- Time scale to healing - 3 to 21 days
- In many cases use of Proshield Plus continued as routine protection

Proshield Plus was well received and effective particularly in the following areas [see Table 1]:

- Simple perianal excoriation, i.e. with broken skin [case study 1]
- Anal fissures [case study 2]
- Perianal thrush, where antifungal creams were applied and then covered with Proshield Plus
- Skin fold protection [case study 3]

The product was not always effective in situations such as:

- Extensively broken skin in the nappy area
- Profuse discharge around stomas
- Where parents had preconceived notions of what will/won't work, with subsequent poor compliance

Table 1: Use of Proshield Plus skin protectant on different skin complaints in children

Problem	Range in years (median) n = 38	Days of treatment (median)	Results			Same or better than alternatives	
			-	-	+		
Perianal dermatitis	0.02 - 5 (1.2 years)	12	3-8 (4)	2	2	8	83%
Perianal dermatitis + thrush	0.36 - 2.5 (1.5 years)	9	3-10 (5)	1	4	4	88%
Anal fissures	0.1 - 10 (0.9 years)	4	4-21 (9)		1	3	100%
Other: e.g. stomas, dry skin, pressure ulcers, facial lesions	0.01 - 16.4 (5.7 years)	13	7-15 (9)	5	3	5	61%

"-" = worse, "~" = no change, "+" = good improvement,

Routine Nappy Care

Throughout the hospital the nurses (and parents) use a range of products on their patients. These include Baby wipes, Cavilon, Drapolene, Granuflex, Sudocreme, Honey Barrier Cream, Metanium, Vaseline and assorted mixtures

recommended by 'somebody' who said they were effective. Often this doesn't matter a lot, but when there is a problem or children are undergoing chemotherapy for example, we have recommended the following:

Table 2: Examples encountered in nappy care that may lead to or exacerbate skin problems

Cleaning with water/baby wipes	X	Drying, stinging
Using tough, abrasive wipes or cotton wool to clean	X	Abrasive/leaves fibres
Hard or too frequent rubbing/wiping of the skin	X	Friction/abrasion
Multiple products in use at the same time, or changed rapidly from one to another.	X	Confusion – staff & parents, unable to ascertain effective product
Products applied too thickly or inappropriately applied	X	Clogged nappies, create further problems/pain and discomfort
Highly coloured products used	X	Unable to visualise skin, tendency to vigorously remove

Table 3: Changes made to care in perianal dermatitis/excoriation

Use of an aqueous cream to clean bottom	✓	Reduce friction, moisturise, soothing
Use gauze or soft plain wipes	✓	Soft, no shed fibres
Gentle wipe, pat/mop off excess cream	✓	less abrasive
Limit range of products	✓	Better compliance, able to evaluate effectiveness
Thin application	✓	Allow nappy to work as designed
Where appropriate, use of a transparent product	✓	Better skin assessment reduces number of changes needed

Discussion

Problems found in nappy care:

- Education of parents and staff – misinformation, no family support
- Lack of knowledge and experience – relatives, everyone an expert, thrush
- Poor communication – literacy, told not shown resulting in poor technique
- Lack of insight/pre-emptive treatment – nurses not anticipating problems associated with chemo or antibiotic use
- Lack of consistent approach – confusing, develops mistrust, distressed children, poor compliance
- Multiple concurrent product use with no ability to assess effect

Using Proshield Plus skin protectant:

- Comfortable, quick response, parents like it
- Ease of product use – more consistency, better compliance
- Parents proactive in seeking product on the wards and continue to use on discharge
- Good company support

Still to iron out:

- Availability in the community – GPs are prescribing but some pharmacies delaying supply
- Under and over application - further use is necessary to more accurately gauge the amount needed

Conclusions

Proshield Plus skin protectant largely worked as well or better than our previous treatments, though there is still a place for these products in a structured approach. Granuflex paste remains a strong alternative in some cases. We found Proshield Plus to be a valuable tool in preventing or treating incontinence associated tissue damage in children. Further usage will definitely help with our understanding of its benefits and limitations.

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Case study 1

A was a 3 week old baby with a spinal lesion that had been resected, leaving him paralysed from the waist down. Antibiotics gave him diarrhoea and he quickly developed an excoriated, bleeding bottom through very frequent nappy changes.

Proshield Plus skin protectant was started and used at each nappy change. Within 3 days his bottom had healed, despite the continuing incontinence. Parents continue to use the product at home and A has had no further skin problems.



Photo 1: Before



Photo 2: After barrier applied



Photo 3: 3 days later

Case study 2

B was a 10 year old boy with Crohns Disease. He had a large anal fissure of 4 years duration and they had tried 'everything', probably several times – nothing worked. He began to respond almost immediately to the use of Proshield Plus and was delighted with the treatment. His mum wrote saying:

"B suffered for many years with deep fissures and experienced severe pain, we were always told that there was little that could be done so he learned to tolerate the pain and discomfort.

After your visit to us it was like a small miracle had occurred...within a week of use B's bottom had almost completely healed and has stayed that way! Thank you..."

Case study 3

C was an 18 month old baby with a long term tracheostomy amongst his other problems. He was having constant problems with both pressure from his trache tapes and moisture in his neck folds. We started to use Proshield Plus on his neck. It cleared the problems associated with moisture which has, possibly by reducing drag, improved the skin under his tapes, reducing pressure damage. Proshield Plus has subsequently been used under trache tapes on a number of children with long-term tracheostomies and the results are very positive.

Parents comments

Mrs D, mother of a toddler with Crohns disease, and herself a senior nurse at the hospital, was desperate. Her son's behaviour had regressed and he was hiding when he needed to go to the toilet. She was given Proshield Plus to try on her son's nappy rash. She reported back that:

'The new product changed our son from a screaming 2 year old at nappy change time to a child who was much happier and more compliant with changes. Within 3 days the red, blistered and bleeding area had almost completely cleared. I would definitely recommend it to friends.'